

Amendments to the Specification

Please replace paragraph [0055] with the following amended paragraph.

[0055] Referring next to FIG. 3, an exemplary flow chart illustrates a specific implementation of the communication protocol for requesting metadata according to the invention. A media player at 302 generates a data request at 304 by determining at 306 if an identifier value is available for inclusion on the data request. If the identifier value is included, the media player formulates a uniform resource locator (URL) at 310 to create an HTTP GET at 312 having various parameters (including the identifier value). The path from an [[An]] exemplary URL using a WMID identifier value is shown below.

<http://windowsmedia.com/redirect/GetMDRCD.asp?wmid=8C0E118D-36E7-43A0-8732-24FA851F8A80&version=9.0.0.0000&locale=409&requestid=B1D119EA-4FC8-409F-BF05-D52E0FED2FDB>

Please replace paragraph [0067] with the following amended paragraph.

[0067] Given an item of media content, a request for metadata may be made in various ways including, but not limited to, one of the ways described herein. In one embodiment, the invention formulates a network address with one or more query string parameters. The formulated network address represents the request data structure. The query string parameter includes an identifier and a value associated therewith. The identifier or a portion thereof includes the text string WMID, CD, TOC, or DVD ID. In one embodiment, the WMID is the WMCollectionID for the media content. The associated value corresponds to the media content. The formulated network address may include a uniform resource locator (URL). For example, a request for metadata includes a WMID identifier corresponding to a specific album or track such as in the following path from a URL.

<http://windowsmedia.com/redirect/GetMDRCD.asp?wmid=8C0E118D-36E7-43A0-8732-24FA851F8A80&version=9.0.0.0000&locale=409&requestid=B1D119EA-4FC8-409F-BF05-D52E0FED2FDB>

Please replace paragraph [0068] with the following amended paragraph.

[0068] In another example, a request for metadata includes a TOC identifier (e.g., CD) corresponding to a physical media identifier such as in the following path from a URL. The TOC value is calculated from the medium as known in the art.

<http://windowsmedia.com/redir/GetMDRCD.asp?cd=E+96+44E0+92F4+F112+101C1+1548E+19BAB+1DF9C+232AA+28A4B+2A0AF+2F6E3+33FBA+37E9E+4258D&version=9.0.0.000&locale=409&requestid=B1D119EA-4FC8-409F-BF05-D52E0FED2FDB>

Please replace paragraph [0069] with the following amended paragraph.

[0069] In another example, a request for metadata includes an HTTP POST for fuzzy matching XML using the MDQ data structure such as in the following path from a URL.

<http://windowsmedia.com/redir/GetMDRCDPOSTURL.asp?version=9.0.0.0000&locale=409>

Please replace paragraph [0070] with the following amended paragraph.

[0070] In the following example of a path from a URL, the URL request returns all data about the media file.

<http://windowsmedia.com/redir/GetMDRCD.asp?cd=E+96+44E0+92F4+F112+101C1+1548E+19BAB+1DF9C+232AA+28A4B+2A0AF+2F6E3+33FBA+37E9E+4258D&version=9.0.0.000&locale=409&requestid=B1D119EA-4FC8-409F-BF05-D52E0FED2FDB>

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1. (currently amended) A method for obtaining metadata for a media content file storing media content, said media content file being stored on a computer storage computer-readable medium, said method comprising:

populating requesting metadata for the media content file from a metadata provider via a request data structure, said request data structure comprising a request type identifier defining a type for the computer storage computer-readable medium, a request identifier, and one or more metadata elements stored with the media content file, wherein the request type identifier comprises MDQ-CD or MDQ-DVD;

requesting metadata for the media content file from a metadata provider via the populated request data structure; and

receiving a return data structure from the metadata provider, said return data structure storing a return type identifier defining the type for the computer storage computer-readable medium, the request identifier, and return metadata corresponding to the requested metadata, wherein the return type identifier comprises MDR-CD or MDR-DVD.

Claim 2. (original) The method of claim 1, wherein the return metadata comprises metadata determined by the metadata provider to be associated with the media content file.

Claim 3. (canceled).

Claim 4. (canceled).

Claim 5. (original) The method of claim 1, wherein the type relates to at least one of the following: a compact disc, a digital versatile disc, and flash memory.

Claim 6. (currently amended) The method of claim 1, wherein the computer storage computer-readable medium comprises one or more of the following: a compact disc, a digital versatile disc, and flash memory.

Claim 7. (currently amended) The method of claim 1, wherein the metadata provider comprises a ~~human or~~ a computer.

Claim 8. (original) The method of claim 1, wherein the return data structure comprises a delay time interval, and further comprising postponing additional requests for metadata until after the delay time interval has elapsed.

Claim 9. (original) The method of claim 1, further comprising:

associating the return metadata or a portion thereof with namespace identifiers including at least one of WMContentID, WMCollectionID, and WMCollectionGroupID; and
storing the namespace identifiers and associated metadata with the media content file.

Claim 10. (original) The method of claim 9, wherein the return metadata comprises a globally unique identifier.

Claim 11. (original) The method of claim 1, further comprising classifying the media content with namespace identifiers including at least one of WMPrimaryClassID and WMSecondaryClassID.

Claim 12. (original) The method of claim 1, further comprising associated the return metadata or a portion thereof with a namespace identifier representing a box set identifier.

Claim 13. (original) The method of claim 1, wherein the metadata elements in the request data structure comprise values associated with namespace identifiers including at least one of WMContentID, WMCollectionID, WMCollectionGroupID, WMPrimaryClassID, and WMSecondaryClassID, wherein the values and namespace identifiers are stored in the media content file.

Claim 14. (original) The method of claim 13, wherein requesting the metadata comprises requesting the metadata from at least one of the following: a local cache, a network server, and a client computer.

Claim 15. (original) The method of claim 1, wherein the media content file comprises one of a plurality of songs in an album, wherein requesting the metadata comprises requesting metadata for the song, and wherein the return metadata comprises metadata for the plurality of songs in the album.

Claim 16. (original) The method of claim 1, further comprising storing the return metadata in a cache.

Claim 17. (original) The method of claim 1, further comprising storing the return metadata with the media content file.

Claim 18. (original) The method of claim 1, further comprising requesting additional metadata from the metadata provider using a portion of the return metadata.

Claim 19. (original) The method of claim 1, wherein requesting the metadata comprises formulating a network address with one or more query string parameters, said formulated network address representing the request data structure.

Claim 20. (original) The method of claim 1, wherein the network address comprises a uniform resource locator.

Claim 21. (original) The method of claim 1, wherein the metadata provider performs:
receiving the request data structure from a computing device;
searching for the requested metadata in a database based on the received metadata elements;
ranking the results of said searching;

correlating the ranked results with a table storing metadata to identify the requested metadata;

populating the return data structure with the identified metadata; and
sending the populated return data structure to the computing device.

Claim 22. (currently amended) One or more computer storage ~~computer~~ readable media having computer-executable instructions for performing the method of claim 1.

Claim 23. (original) A method comprising:

determining an identifier value;
associating the determined identifier value with media content; and
assigning the determined identifier value to one or more of the following fields:
WMContentID, WMCollectionID, WMCollectionGroupID, WMPrimaryClassID, and
WMSecondaryClassID; and
storing the identifier value and assigned fields with the media content.

Claim 24. (original) The method of claim 23, wherein the identifier value comprises a globally unique identifier.

Claim 25. (original) The method of claim 23, wherein the identifier value comprises a class or type for the media content.

Claim 26. (original) The method of claim 23, wherein determining the identifier value comprises generating the identifier value.

Claim 27. (original) The method of claim 23, wherein associating the determined identifier value comprises populating a reference table.

Claim 28. (currently amended) One or more computer storage ~~computer~~ readable media having computer-executable instructions for performing the method of claim 23.

Claim 29. (currently amended) One or more computer storage computer-readable media having computer-executable components for obtaining metadata for a media content file storing media content, said media content file being stored on a computer storage computer-readable medium, said components comprising:

a query component for populating requesting metadata for the media content file from a metadata provider via a request data structure, said request data structure comprising a request type identifier defining a type for the computer storage computer-readable medium, a request identifier, and one or more metadata elements stored with the media content file, wherein the request type identifier comprises MDQ-CD or MDQ-DVD, said query component further requesting metadata for the media content file from a metadata provider via the populated request data structure; and

an interface component for receiving a return data structure from the metadata provider in response to the request sent by the query component, said return data structure storing a return type identifier defining the type for the computer storage computer-readable medium, the request identifier, and return metadata corresponding to the requested metadata, wherein the return type identifier comprises MDR-CD or MDR-DVD.

Claim 30. (currently amended) The computer storage computer-readable media of claim 29, wherein the return metadata comprises metadata determined by the metadata provider to be associated with the media content file.

Claim 31. (canceled).

Claim 32. (canceled).

Claim 33. (currently amended) The computer storage computer-readable media of claim 29, further comprising an authoring component for:

associating the return metadata or a portion thereof with namespace identifiers including at least one of WMContentID, WMCollectionID, and WMCollectionGroupID; and
storing the namespace identifiers and associated metadata with the media content file.

Claim 34. (currently amended) The computer storage computer-readable media of claim 33, wherein the authoring component further classifies the media content using other namespace identifiers including at least one of WMPrimaryClassID and WMSecondaryClassID.

Claim 35. (currently amended) The computer storage computer-readable media of claim 33, wherein the authoring component further comprises:

determining an identifier value;

associating the determined identifier value with media content; and

assigning the determined identifier value to one or more of the following namespace identifiers: WMContentID, WMCollectionID, and WMCollectionGroupID; and

storing the identifier value and assigned namespace identifiers with the media content.

Claim 36. (currently amended) The computer storage computer-readable media of claim 29, wherein the metadata elements in the request data structure comprise values associated with namespace identifiers including at least one of WMContentID, WMCollectionID, WMCollectionGroupID, WMPrimaryClassID, and WMSecondaryClassID, wherein the values and namespace identifiers are stored in the media content file.

Claim 37. (currently amended) A media player comprising computer-executable instructions for obtaining metadata for a media content file, said media content file being stored on a computer storage computer-readable medium, said instructions comprising:

populating requesting metadata for the media content file from a metadata provider via a request data structure, said request data structure comprising a request type identifier defining a type for the computer storage computer-readable medium, a request identifier, and one or more metadata elements stored with the media content file, wherein the request type identifier comprises MDQ-CD or MDQ-DVD;

requesting metadata for the media content file from a metadata provider via the populated request data structure; and

receiving a return data structure from the metadata provider, said return data structure storing a return type identifier defining the type for the computer storage computer-readable

medium, the request identifier, and return metadata corresponding to the requested metadata, wherein the return type identifier comprises MDR-CD or MDR-DVD.

Claim 38. (original) The media player of claim 37, wherein the instructions further comprise classifying the media content file based on the return metadata.

Claim 39. (original) The media player of claim 37, wherein the return data structure comprises a delay time interval, and wherein the instructions further comprise postponing additional requests for metadata until after the delay time interval has elapsed.

Claim 40. (original) The media player of claim 37, wherein the instructions further comprise:
associating the return metadata or a portion thereof with namespace identifiers including at least one of WMContentID, WMCollectionID, WMCollectionGroupID; and
storing the namespace identifiers and associated metadata with the media content file.

Claim 41. (original) The media player of claim 37, wherein the instructions further comprise classifying the media content using other namespace identifiers including at least one of the following: WMPrimaryClassID and WMSecondaryClassID.

Claim 42. (original) The media player of claim 37, wherein the instructions further comprise:
determining an identifier value;
associating the determined identifier value with media content; and
assigning the determined identifier value to one or more of the following namespace identifiers: WMContentID, WMCollectionID, and WMCollectionGroupID; and
storing the identifier value and assigned fields with the media content.

Claim 43. (currently amended) A computer storage ~~computer readable~~ medium having stored thereon a data structure representing a request for metadata, said data structure for transmission by a first computing device to a second computing device to request metadata for media content, said data structure comprising:

a request type identifier defining a type for a destination computer storage computer-readable medium storing the media content, wherein the request type identifier comprises MDQ-CD or MDQ-DVD;

a request identifier; and

one or more metadata elements stored with the media content.

Claim 44. (canceled).

Claim 45. (currently amended) The computer storage computer-readable medium of claim 43, wherein the type relates to at least one of the following: a compact disc, a digital versatile disc, and flash memory.

Claim 46. (currently amended) The computer storage computer-readable medium of claim 43, wherein the destination computer storage computer-readable medium comprises one or more of the following: a compact disc, a digital versatile disc, and flash memory.

Claim 47. (currently amended) A computer storage computer-readable medium having stored thereon a data structure sent from a first computing device to a second computing device in response to a request for metadata sent by the second computing device, said data structure comprising:

a return type identifier defining a type for a destination computer storage computer-readable medium storing the media content, wherein the request type identifier comprises MDR-CD or MDR-DVD;

a request identifier; and

return metadata corresponding to the requested metadata.

Claim 48. (canceled).

Claim 49. (currently amended) The computer storage computer-readable medium of claim 47, further comprising a delay interval specifying a time period for postponing additional requests for metadata by the second computing device.

Claim 50. (currently amended) The ~~computer storage computer-readable~~ medium of claim 47, wherein the type relates to at least one of the following: a compact disc, a digital versatile disc, and flash memory.

Claim 51. (currently amended) A ~~computer storage computer-readable~~ medium having stored thereon a data structure representing a namespace for identifying media content, said data structure comprising:

 a first field storing a content identifier value, said first field having a label of WMContentID;

 a second field storing a collection identifier value, said second field having a label of WMCollectionID; and

 a third field storing a group identifier value, said third field having a label of WMCollectionGroupID.

Claim 52. (currently amended) The ~~computer storage computer-readable~~ medium of claim 51, wherein said first, second, and third fields represent different levels of granularity for identifying the media content.

Claim 53. (currently amended) The ~~computer storage computer-readable~~ medium of claim 51, wherein the content identifier value, the collection identifier value, and the group identifier value each comprise a globally unique identifier.

Claim 54. (currently amended) The ~~computer storage computer-readable~~ medium of claim 51, wherein the third field represents a box set identifier.

Claim 55. (currently amended) A ~~computer storage computer-readable~~ medium having stored thereon a data structure representing a namespace for classifying media content, said data structure comprising:

 a first field storing a primary identifier value, said first field having a label of WMPrimaryClassID; and

a second field storing a secondary identifier value, said second field having a label of WMSecondaryClassID.

Claim 56. (currently amended) The computer storage computer readable medium of claim 55, wherein said first and second fields represent different levels of granularity for classifying the media content.

Claim 57. (currently amended) The computer storage computer readable medium of claim 55, wherein the primary identifier value and the secondary identifier value each comprise at least one of the following: audio[[],] and video, and other.

Claim 58. (currently amended) The computer storage computer readable medium of claim 55, wherein the primary identifier value and the secondary identifier value each comprise a globally unique identifier.

Claim 59. (currently amended) A computer storage medium having stored thereon a computer-readable file, said computer-readable file storing:

media content;

one or more of the following identifiers characterizing the media content: WMContentID, WMCollectionID, WMCollectionGroupID, WMPrimaryClassID, and WMSecondaryClassID; and

an identifier value associated with each of the one or more identifiers.

Claim 60. (currently amended) The computer storage medium computer-readable file of claim 59, wherein the identifier value for WMContentID, WMCollectionID, and WMCollectionGroupID comprises a globally unique identifier.

Claim 61. (currently amended) The computer storage medium computer-readable file of claim 59, wherein the identifier value for WMPrimaryClassID and WMSecondaryClassID comprises one of the following: audio[[],] and video, or other.

Claim 62. (currently amended) The computer storage medium computer-readable file of claim 59, wherein the following identifiers represent increasing levels of granularity for classifying the media content: WMCollectionGroupID, WMCollectionID, and WMContentID.

Claim 63. (currently amended) The computer storage medium computer-readable file of claim 59, wherein the following identifiers represent increasing levels of granularity for identifying the media content: WMPrimaryClassID and WMSecondaryClassID.

Claim 64. (currently amended) A method for obtaining metadata for media content, said media content being stored on a computer storage computer-readable medium, said method comprising:

formulating a network address with a query string parameter, said query string parameter comprising an identifier and a value associated therewith, said identifier or a portion thereof comprising the text string WMID, said associated value corresponding to the media content.

Claim 65. (original) The method of claim 64, wherein the formulated network address comprises a uniform resource locator.

Claim 66. (currently amended) The method of claim 64, further comprising:

requesting metadata for the media content file from a metadata provider via the formulated network address; and

receiving a return data structure from the metadata provider, said return data structure storing a return type identifier defining a type for the computer storage computer-readable medium, a request identifier, and return metadata corresponding to the requested metadata.

Claim 67. (original) The method of claim 64, further comprising another query string parameter, said query string parameter comprising another identifier and another value associated therewith, said other identifier comprising one or more of the following: VERSION, LOCALE, and REQUESTID.

Claim 68. (currently amended) A method for obtaining metadata for media content, said media content being stored on a computer storage computer-readable mcdium, said method comprising:

formulating a network address with a query string parameter, said query string parameter comprising an identifier and a value associated therewith, said identifier or a portion thereof comprising the text string CD, said associated value corresponding to the media content.

Claim 69. (original) The method of claim 68, wherein the formulated network address comprises a uniform resource locator.

Claim 70. (currently amended) The method of claim 68, further comprising:

requesting metadata for the media content file from a metadata provider via the formulated network address; and

receiving a return data structure from the metadata provider, said return data structure storing a return type identifier defining a type for the computer storage computer readable medium, a request identifier, and return metadata corresponding to the requested metadata.

Claim 71. (original) The method of claim 68, further comprising another query string parameter, said query string parameter comprising another identifier and another value associated therewith, said other identifier comprising one or more of the following: VERSION, LOCALE, and REQUESTID.

Claim 72. (currently amended) A method for processing media content, said method comprising:

receiving a request for metadata, said metadata being associated with media content, said request comprising one or more metadata elements;

searching for the requested metadata in a database based on the received metadata elements;

ranking the results of said searching; and

correlating the ranked results with a table storing metadata to identify the requested metadata from the table based on the ranked results.

Claim 73. (original) The method of claim 72, wherein searching for the requested metadata comprises searching the database based on the metadata elements collectively.

Claim 74. (original) The method of claim 72, wherein ranking the results comprises assigning a weighting to each of the results based on the searching method and received metadata elements.

Claim 75. (currently amended) One or more computer storage ~~computer~~ readable media having computer-executable instructions for performing the method of claim 72.